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Accounting information system and non-financial performance in small firm: Empirical research based on ethnicity

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Abstract. The purpose of this research was to examine the impact of accounting information systems (AIS) alignment on non-financial performance. This research aims to enrich the literature on AIS implementation among indigenous and non-indigenous ethnics. Using a mail questionnaire survey, data were collected from 87 small firms' owners. To describe the respondents' demography, the research data were analyzed by means of using descriptive statistics. The hypothesis was tested via multiple regression to recognize the effects of AIS alignment on non-financial performance and also independent sample t-test was carried out to examine the difference for each indicator. The results of this research show that there was a positive effect of AIS alignment on small and medium enterprises' (SMEs) non-financial performance, both indigenous and non-indigenous (Chinese). There was no difference in perception of AIS alignment but significant difference in non-financial performance between indigenous and non-indigenous groups within our sample. This research issue is original as it has not been studied before. This research provides better understanding of the indigenous and

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Chinese ethnics' differences and attitudes when it comes to planning and utilizing information systems to achieve better performance.

Keywords: accounting information system, non-financial performance, ethnicity, small firm.

JEL Classification: M15

1. INTRODUCTION

Research investigating different ethnic (indigenous and Chinese in particular) perspective on business are abundant (Bruton, Ahlstrom, & Wan, 2003; Dieleman, 2010; Dieleman & Sachs, 2008; Ismail & Zin, 2009; Lindsay, 2005; Yeung, 2006) while there is widespread acceptance that ethnics has its effect on culture and behavior of businesses (Ahlstrom, Chen, & Yeh, 2010; Child, 2002). In recent year, tens of millions of Chinese people in Southeast Asia have been engaged in a distinctive form of business and economic organization (Yeung, 2006). In Indonesia, despite being only 5% of the total population, the Chinese have a dominant role in developing domestic economy, social organization, and authority system (La Ode, 2010). The Chinese ethnics experience some barriers in politics, government, and education, but at the same time enjoy great opportunities in the economic field. According to some estimations, the Chinese are today controlling about 70% of Indonesia's economy (Noviasari & Untari, 2013).

Besides the economics field, mastering the technology is a big chance for Chinese ethnics as to what concerns developing and enlarging their businesses. Previous research states that information technology (IT) implementation depends on the culture/ethnics (Fakhrul Anwar & Wan Norhayate, 2011; Sajady, H., Dastgir, M. & Nejad, 2008). Culture is important for indigenous people who have a strong feeling towards self-determination. The indigenous people have affinity with the local natural environment and economic situation so they tend to take more efforts to make the local economic, social and environmental situation better (Lindsay, 2005). On the other hand, other researcher found that Chinese ethnic tends to be more adapted to business environment as such (Dieleman, 2010). Therefore, based on these findings above, it can be concluded that the cultural (ethnic) differences in perception will potentially effect the course of information technology implementation and its outcome (Dibrel, David, & Craig, 2008; Ismail & Zin, 2009; Lee & Lee, 2010).

SMEs are used as an object in this research because they often experience more need to adopt IT to achieve the expected performance (Lee, Kim, Choi, & Lee, 2009; Tuanmat & Smith, 2011). Accounting information systems (AIS) are tested in this research on SMEs since AIS is a part of IT (Grande, Estébanez, & Colomina, 2011). AIS plays an essential role in organizations as a provider of information used by management for strategic decision-making (Naranjo, 2004). AIS is important for SMEs performance as it helps small firms manage their business (Dibrel, David, & Craig, 2008; Ismail & King, 2006). Many studies have examined the use of AIS in the context of SMEs (Al-Eqab & Ismail, 2011; Amidu, Effah, & Abor, 2011; Budiarto, Prabowo, & Herawan, 2017; Budiarto et al., 2018; Grande et al., 2011; Ismail & King, 2005). However, very limited research has paid enough attention to the effect of AIS implementation on non-financial performance basing on the factor of ethnicity. The importance of this research is to know whether IT implementation by small business representatives Chinese ethnicity potentially gives a competitive advantage. The result of this research is essential to SMEs owners themselves, both indigenous and Chinese, in part of accounting information system requirements and when selecting the matching AIS processing capacity and increasing performance overall.

This research was conducted in Yogyakarta since the Special Region of Yogyakarta (DIY) Governor Instruction No. K.898/I/A/1975 restricts land and property ownership for Chinese ethnics. According to the motivation theory, there is a difference in motivation between indigenous and Chinese ethnics because of differences in treatment. These differences mean, in simple terms, that Chinese ethnics need to work harder to achieve the goals in their life. Furthermore, Chinese ethnics often face a psychological condition called fraternal relative deprivation, a situation in which they feel that their inner group gets pressure from the outside groups that are dominating in the society in which they live (Schmitt, Maes, & Widaman, 2010). For this very reason this study will identify whether cultural differences affect the use of AIS in its relation to SME's non-financial performance. The relation between ethnicity and small firm performance is still an open empirical question, never studied before, to the best of our knowledge. The objective of this research is to explore the effect of AIS alignment on small firm performance taking into account the ethnicity factor.

The findings of this research contribute to literature on IT implementation and SMEs performance. This research provides better understanding of the indigenous people behavior in planning and utilizing information systems to achieve better performance. This study posits that SMEs owner will find an effective strategy by choosing a suitable AIS to face the competitive environment. It is also crucial for the government to develop and implement policies supporting IT development among the local SMEs.

2. RESEARCH MODEL

The research model refers to the previous research (Ismail & King, 2005) that analyzes the relationship between AIS alignment and performance. The difference of this study with the previous one is the use of ethnic to test the effect of AIS alignment on non-financial performance. According to the information process theory developed by Galbraith, the fitness between information systems (AIS alignment) will be achieved if the need of information (AIS requirement) matches with the information capacity (AIS capacity). An interaction between AIS requirement and AIS capacity will shows an AIS alignment. The level of interaction shows in the multiplication between AIS requirement question items and AIS capacity question items. The higher the interaction score, the higher the AIS alignment level (high alignment). The high alignment will improve organizational performance (Ismail & King, 2006, 2014). The relationship between AIS requirement, AIS capacity, AIS alignment, and performance is present in Figure 1.

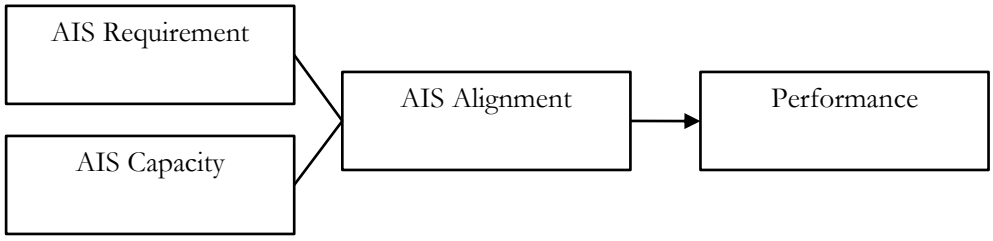

Figure 1. Research model

3. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Ethnic is an aspect that can form culture in a society and affect business behavior (Haniffa & Cooke, 2002; Mohamed Yunos, Ismail, & Smith, 2012). Culture is "the collective programming of the mind which distinguishes the members of one group or category of people from another." Culture value/ethnic is very important because it will affect someone's lifestyle and behavior, including an owner of business (Hofstede, 2011). The owner of business will manage their company according to their principles and culture (Nazri,

Smith, & Ismail, 2012). The difference in ethnic may lead to the difference in company strategy because the non-indigenous people i.e. Chinese ethnic are tend to be more risk taker than indigenous people when making a decision (Mohamed Yunos et al., 2012).

Furthermore, many studies have documented that ethnic (both indigenous and non-indigenous) potentially associated with economic growth (Dieleman, 2010; Yeung, 2006; Yuli Zhang & Yang, 2006). However, the previous study found that economic growth, financial and capital for developing a Chinese's business are faster than indigenous's business (Fakhrul Anwar & Wan Norhayate, 2011; Yanfeng Zhang & Si, 2008). Moreover, the development of information technology in South East Asia has affected by Chinese ethnic (Yeung, 2006). Other studies support that most indigenous (Bumiputra) SMEs have lack of awareness in understanding the importance of information technology for run their business (Ismail & Zin, 2009).

An optimal implementation of IT possibly will manage the competitiveness of SMEs. Even though the size is small, it must assimilate with the use of IT (Estebanez, Grande, & Colomina, 2010). In an uncertain environment, many organizations make a considerable investment in technology information, which it can increase quality and productivity (Tuanmat & Smith, 2011). Some SMEs located in English were reporting higher performance when they use quality (Sousa, Aspinwall, & Rodrigues, 2006). The results of the previous study state that AIS compliance could be realized with the fitness between information capacity and information required. The availability data showed on the products manufactured will be related to the information on the sales, production level, and the profit obtained. Information on the supply will be referred to the information on the defected raw materials, so it can increase the non-financial performance of SME's (Budiarto, Prabowo, & Rahmawati, 2015).

The shortcomings of traditional management accounting and performance measurement systems have become painfully apparent in recent years (Jusoh, Ibrahim, & Zainuddin, 2008). It will challenges the organization to develop a consistent measurement for a long-term profitability (Kaplan & Norton, 2008; Kotane & Kuzmina-Melino, 2011). Non-financial performance is needed to support SMEs financial performance (Budiarto, 2014). It is expected that the measurement of non-financial performance will give a long-term impact on the SMEs continuity in the uncertainty business environment. Therefore, the use of AIS and the non-financial performance measurement as part of SMEs strategy in winning the competition is needed to be tested related to the culture/ethnic. Based on these previous findings, the hypothesis is proposed as follow:

H_1: there is a positive effect between AIS alignment on SMEs non-financial performance

Besides affecting business, culture/ethnic also affects the accounting development (Iskandar & Poujalali, 2000; Mohamed Yunos et al., 2012), including the technology development (H. H. Lee & Lee, 2010; Lopez, Hart, & Rampersad, 2007). The other finding shows that the indigenous ethnic in Malaysia faces difficulty in using accounting software which made the AIS implementation be less optimum (Ismail & Zin, 2009). Another research in the US, proves that the differences in ethnic affect the technology adoption, moreover for administrative of company strategic analysis purpose (Middleton & Byus, 2011). Non-Hispanic ethnic adopt the technology better than Hispanic. Thus, we may conclude that technology implementation depends on the ethnicity because each ethnic will have a different culture. Based on the result of the studies above, we propose the following hypothesis:

H_2: there is a different perception on AIS alignment between indigenous and Chinese ethnics

The minority ethnic was developed rapidly and provided a significant contribution to the economic development in the US (Coleman, 2005). Coleman research shows that minority ethnic has higher company profitability than a white man, but without differences in the sales growth. Another research explains that technology utilization by immigrant ethnic can encourage the company to be more efficient, thus increasing the effectiveness of the strategy as well as improving profitability (Middleton & Byus, 2011). The other finding proves that company which managed by an indigenous ethnic in Malaysia have a good performance

(Fakhrul Anwar & Wan Norhayate, 2011). However, another result explains that when making a decision, non-indigenous is more risk taker than indigenous ethnic in Malaysia (Mohamed Yunos et al., 2012). Thus, we can conclude that the ethnic difference will lead to the difference of perception in strategic planning and organizational performance assessment. Based on the findings above, we propose the following hypothesis:

H_3: there is a different perception on non-financial performance between indigenous and Chinese ethnics

4. RESEARCH METHOD

This study uses a positive approach based on social reality and behavior including the use of information technology and performance. A positivist approach is related to quantitative research that use questionnaires to gather the data (Sharma & Bhagwat, 2006). This study also uses the information process theory proposed by Galbraith which explains that AIS alignment will improve performance (Stock & Tatikonda, 2000). Moreover, this study uses the fraternal relative deprivation theory to connect ethnicity with technology and small firm performance. The fraternal relative deprivation theory explains the feeling of unfairness felt by someone compared to others so it can encourages people to work better (Schmitt et al., 2010).

This research is conduct only on SMEs in retail area since the difference in types of business will affect on technology implementation and performance (Budiarto, 2014). Moreover, based on the results of the pre-survey test, the majority of SMEs which used IT are work in retail and services area. In the retail area, the non-financial performance will depends on the high service quality, although providing the high service quality will increase the cost. Even though, previous research states that non-financial performance measurement is more suitable for measuring the retail company's performance (Mishra & Vishwas, 2018).

The population of this research is all SMEs owner who use information technology in Yogyakarta. Before distribute the questionnaire, there was a pretest for academic, student research and SMEs owner to ensure that the certain degree of understanding can be reached by all of the respondent when answering the questions. The questionnaire were mailed to the SMEs owners with a covering letter and replied paid envelope. SMEs owner who has chosen as respondent is the owner who responsible for developing IT in their business and achieve better performance. Due to the result of mail questionnaire survey, there were 87 small firm owners submitting the data. To describe respondent demography, the research data were analyzed by using descriptive statistics. All of hypothesis were tested by analyzing the means of multiple regression to recognize the effects of AIS alignment on non-financial performance and independent sample t-test to examine the different for each indicator.

The respondents are spreading in five districts of Yogyakarta Province called Sleman, Bantul, Kulon Progo, Gunung Kidul, and the city of Yogyakarta. A non-probability (purposive) sampling technique is employed in this study. The selection of the sample based on the judgment of the appropriate characteristic or criteria required from the sample members. This technique suggests that the model allows the researcher to select a sample for a specific purpose, and will make the sample more representative (Zikmund, 2000). The criteria for choosing the samples are based on the Indonesian State legislation (UU no 20/2008) which states that SMEs are companies owned by individuals, have maximum turnover of 2.5 billion IDR, maximum net assets of 200 million IDR, with a number of employees between 5 and 19 for small firms and 20-99 for medium firms.

In this research, the moderation perspective measures alignment is using the fitness of AIS requirement and AIS capacity. The AIS alignment measured by multiplying the rating of AIS requirement items and AIS capacity items. In this case, the high alignment score will results from the high ratings of AIS requirement and AIS capacity. Otherwise, the low alignment score will results from the low rating of AIS requirements and AIS capacity items. In this study, each question of AIS requirement was measured using a four-point

scale (1= not important; 4= very important) while AIS capacity questions was measured using a four-point scale (1= not available; 4= extensively available). Firstly, the total questions are 19 items which developed by (Ismail & King, 2006). After doing the validity test, 7 items were dropped from the list (p> 0.05). It related to the firm division where mostly of which don't have any divisions in their business organization. The rest of 12 questions explain about: 1) future events; 2) non-economics information; 3) external information; 4) non-financial (production); 5) non-financial (market); 6) temporal report; 7) decisional models; 8) organizational effect; 9) speed of reporting; 10) automatic receipt; 11) frequency of reporting; 12) immediate reporting (Ismail & King, 2014).

Based on previous research, (Choe, 2002) the seven non-financial performance of information produced by AIS were specifically select. They are: 1) Incidences of product defects; 2) improvement of product quality; 3) rate of introduction of new products; 4) number of product returns; 5) Evaluation of the ability to calculate variations of the product; 6) length of cycle time from order to delivery; 7) measurement of machine utilization and downtime. The Respondents were asked to indicate on a four-point scale (1= no amount of information; 4= very large information).

5. RESULT

All of the respondents of this study is are SMEs owners, who responsible in the development of information technology and technology to achieve organizational performance (Budiarto, 2014). The questionnaire was distributed to 300 SMEs owners. The survey generates 110 returning questionnaires, but only 87 questionnaires can be further analyzed (response rate of 22%), while the remaining questionnaires are incomplete.

Table 1

Profile of respondent

Profile of respondent	Indigenous	Non-indigenous	Percentage (%)
(1)	(2)	(3)	(4)
Company age:			
1. < 5 year	25	7	36.8
2. 5-10 year	20	12	36.8
3. > 10 year	9	14	26.4
The number of employees:			
1. < 10 people	34	11	51.7
2. 10-50 people	20	22	48.3
3. > 50 people			0
Adoption level			
1. Initiation	44	26	80.5
2. Diffusion	7	4	12.6
3. Integration	3	3	6.9
Based on ethnics			
1. Indigenous	54		62.1
2. Non-indigenous		33	37.9

The analysis generates the following respondent demography: 32 (36.8%) enterprises have been in operation less than 5 years; 32 (36.8%) enterprises for 5-10 years; 23 (26.4%) enterprises for more than 10 years. Forty-five (51.7%) enterprises have less than 10 employees; 42 (48.3%) have 10-50 employees. The majority of SMEs (80.5 %) are at the initiation level, and the remaining are in the diffusion level (12.6%), and integration level (6.9%). The majority of SMEs owner 54 (62.1%) are indigenous ethnics, and the

remaining are Chinese ethnics 33 (37.9%). Based on the analysis of 87 questionnaires, the profile of the respondents are shown in Table 1. Based on the table, it can be explained that the variations of the non-indigenous sample from company age (more than 10 years) are 42% and 16% is indigenous. On the other hand, the variations of a non-indigenous sample from the number of employees (more than 10 employees) is 66% while only 37% indigenous.

5.1. Verification of validity and reliability

This research use product moment correlation to test the instrument validity (Table 2 & Table 3). The result of a validity test on AIS requirement, AIS capacity, and non-financial performance instrument is significant ($p<0.05$) therefore, it can be concluded that all instrument are valid. The reliability test (table 2 & table 3) showed that Cronbach's alpha value above 0.6 (AIS requirement: 0.758; AIS capacity: 0.824; Non-financial performance: 0.816). After validity and reliability test for all the instruments, this study was followed by hypotheses testing.

Table 2

Validity and reliability testing

Instrument	AIS requirement	AIS capacity
(1)	**(2)**	**(3)**
Future event	0.457**	0.543**
Non-economics information	0.498**	0.561**
External information	0.431**	0.502**
Non-financial (production)	0.577**	0.605**
Non-financial (market)	0.482**	0.539**
Temporal report	0.482**	0.554**
Decisional models	0.516**	0.638**
Organizational effect	0.566**	0.591**
Speed of reporting	0.462**	0.551**
Automatic receipt	0.535**	0.559**
Frequency of reporting	0.513**	0.635**
Immediate reporting	0.498**	0.586**
Cronbach's alpha	0.758	0.824

** Significant level at $p < 0.01$

This study employed regression analysis and 2 independent sample t-tests to test the hypothesis. Regression analysis is used to examine the effect of AIS alignment on non-financial performance based on ethnic. Independent sample t-test is used to test the different implementation of AIS based on ethnic.

Table 3

Validity and reliability testing

Instrument	Non-financial performance
(1)	(2)
Incidences of product defects	0.730**
Improvement of product quality	0.677**
Number of the introduction of new products	0.641**
Number of product returns	0.747**
Evaluation of the ability to calculating variations of the product	0.735**
Length of cycle time from order to delivery	0.692**
On time delivery performance records	0.668**
Cronbach' alpha	0.816

** Significant level $p < 0.01$

5.2. Hypotheses testing

The result shows that first equation and second equation were significantly at the 0.05 level (Table 4). It means that AIS alignment has a significant effect on non-financial performance, both in indigenous and Chinese ethnic model. The beta's coefficient score is 0.295 for first equation (indigenous) and 0.684 for second equation (Chinese ethnics). Both Chinese ethnic or indigenous have the same term on accounting information implementation and performance. The score of determination coefficient is 0.087 for first equation and 0.468 for second equation. It means that non-financial performance for Chinese ethnic is profoundly explained by AIS alignment (**H_1 supported**).

The independent sample t-test reported in Table 5 indicates that both indigenous and Chinese ethnic were significantly different at 0.207 level for AIS alignment. This result means that there is no significant difference between the Chinese ethnics with indigenous on the implementation of AIS (**H_2 rejected**). The testing result of non-financial performance variables shows a significance level of 0.016. It means that there is a significant difference between the indigenous and Chinese ethnic on non-financial performance measurement (**H_3 supported**).

Table 4

Regression analysis between indigenous and non-indigenous

Model	Beta coefficient	P value	R^2	F value
(1)	(2)	(3)	(4)	(5)
Indigenous	0.295	0.030*	0.087	4.966
Non-indigenous	0.684	0.000**	0.468	27.226

* Significant level $p < 0.05$, ** Significant level $p < 0.01$

The mean score showed in Table 5 for AIS requirement (indigenous) is 3.11, and Chinese ethnic is 3.15, the mean score for AIS alignment (indigenous) is 10.18, and Chinese ethnic is 10.72. The mean score for AIS capacity (indigenous) is 3.23 and Chinese ethnic is 3.38, the mean score for non-financial performance variable (Chinese ethnic) is 3.39 and indigenous is 3.15. It means that Chinese ethnic has better perception than indigenous on AIS alignment and non-financial performance. High alignment score indicated by a high mean score for indigenous and non-indigenous.

Table 5

AIS alignment and Non-financial performance (independent sample t test)

Variable	Indigenous		Non-Indigenous		Lavene's test (F. Prob.)	P value
	Mean	S Dev.	Mean	S Dev.		
1. AIS Requirement	3.11	0.349	3.15	0.370	0.600	0.561
2. AIS Capacity	3.23	0.388	3.38	0.354	0.595	0.068
3. AIS alignment	10.18	1.917	10.72	1.890	0.977	0.207
4. Non-financial performance	3.15	0.458	3.39	0.448	0.473	0.016*

* Significant level $p < 0.05$

Table 6

AIS alignment indicators (independent sample t test)

AIS alignment items	Indigenous		Non-Indigenous		Lavene's test (F prob.)	P value
	Mean	S Dev.	Mean	S Dev.		
1. Future events	8.28	3.92	10.36	3.64	0.853	0.015*
2. Non-economics information	9.67	3.52	10.21	3.12	0.436	0.467
3. External information	8.78	3.64	10.73	3.34	0.878	0.015*
4. Non-financial (production)	9.80	2.86	9.48	2.97	0.548	0.629
5. Non-financial (market)	9.35	3.43	11.24	2.93	0.367	0.010*
6. Temporal report	10.78	3.38	10.24	3.58	0.783	0.485
7. Decisional models	11.09	2.47	10.97	2.72	0.460	0.829
8. Organizational effect	10.74	4.07	11.12	3.96	0.956	0.670
9. Speed of reporting	10.89	3.17	10.24	3.58	0.423	0.382
10. Automatic receipt	10.78	3.42	10.85	3.64	0.583	0.928
11. Frequency of reporting	11.20	2.44	10.97	2.72	0.353	0.679
12. Immediate reporting	10.85	3.69	12.21	2.82	0.018*	0.057

* Significant level $p < 0.05$

Details of the statistical analysis for all of AIS alignment indicators are presented in **table 6**. The result shows that 9 indicators have a significant level above 0.05, while 3 indicators have significant at 0.05 level. The result shows a high mean score for the future event (10.36), non-economics information (10.21), external information (10.73), non-financial market (11.24), organizational effect (11.12), automatic receipt (10.85) and immediate reporting (12.21) for Chinese ethnic. However, other indicators show high mean score such as non-financial production (9.80), temporal report (10.78), decisional models (11.09), a speed of reporting (10.89) and frequency of reporting (11.20) for indigenous. Overall, the high mean score in 10 measurement items (> 9.00) show that is fit between the AIS requirement with AIS capacity (high alignment).

Table 7

Non-financial performance indicators (independent sample t test)

Non-financial performance items	Indigenous		Non-indigenous		Lavene's test (F. Prob.)	P value
	Mean	Std. Dev.	Mean	Std. Dev.		
1. Incidences of product defects	3.39	0.529	3.48	0.619	0.159	0.444
2. Improvement of product quality	2.91	0.734	3.27	0.761	0.336	0.029*
3. A rate of introduction of new products	3.06	0.738	3.48	0.508	0.470	0.004*
4. Number of product returns	3.37	0.525	3.42	0.561	0.391	0.652
5. Evaluation of the ability to calculate variations of the product	3.37	0.525	3.42	0.561	0.391	0.652
6. Length of cycle time from order to delivery	2.89	0.634	3.30	0.728	0.054	0.006*
7. On time delivery performance record	3.06	0.656	3.36	0.549	0.591	0.027*

* Significant level $p < 0.05$

The result of the independent sample t-test for all non-financial performance indicators is presented in Table 7. The result indicates that four indicators (improvement of product quality, a rate of introduction of new product, length of cycle time from order to delivery and on-time delivery performance record) have significant level < 0.05. It means that there are significant differences between indigenous and Chinese ethnic for non-financial performance perception. The result shows a high mean score for all indicators of product defects (3.48), a rate of introduction of the new product (3.48), length of cycle time from order to delivery (3.30), On time delivery performance record (3.36) for Chinese ethnic. However, other indicators show the high mean score on the improvement of product quality (2.91), the number of product return (3.37), and evaluation of the ability to calculate variations of the product (3.37 - high mean score for all Chinese indicators) for indigenous. Significant different on the rate of introduction of new product indicate that Chinese ethnic has a better perception of the external process.

6. CONCLUSION AND DISCUSSION

The testing of hypothesis shows that 1) there is a significant effect between AIS alignment on non-financial performance both Indigenous and non-indigenous; 2) there is no significant difference between the indigenous and Chinese ethnic in the implementation of IT; 3) there is significant difference between the indigenous and Chinese ethnic in non-financial performance measurement. The regression coefficient of non-indigenous is 0.468 which bigger than indigenous. It means that non-financial performance variation statistically for non-indigenous is higher than indigenous one. Even though, it must be tested deeper to support the fraternal relative deprivation theory (Noviasari & Untari, 2013; Schmitt et al., 2010) which states that a person who is in a minority environment will demonstrate their abilities better than the person in a majority group. It also supports that the limitations owned by Chinese ethnic make them motivated to work harder.

Based on the results of the means test, the AIS alignment indicator indicates that the 5 indicators (indigenous) are higher than 7 indicators on Chinese ethnic. The indicators that have a higher mean score

for indigenous related to the information such as non-financial (production), temporal report, decisional models, a speed of reporting, and frequency of reporting. Significant differences between indigenous and non-indigenous shown in the 3 indicators are a future event, external information and non-financial market. The indicators that have a high mean score (AIS requirement) for the Chinese ethnic such as future events, non-economics information, external information, non-financial (market), automatic receipt, immediate reporting. The analysis result is supported by information from SMEs owner so that, it can be explained that the indigenous perception of the information related to internal conditions of the organization is better than the Chinese ethnic. Indigenous more emphasis on the company's internal processes so that the need for AIS requirement and AIS capacity related to internal processes are higher than one. However, the Chinese ethnic perceptions regarding to external information of the firm are better than the indigenous. The threat of the competitors is crucial factors that concern in IT implementation for Chinese ethnic. The strategic of Chinese ethnic will tend to be aligned with the external business environment (Dieleman, 2010).

There is a significant difference between indigenous and non-indigenous on non-financial indicators. These results support the previous findings of the AIS alignment indicators that non-indigenous are needs more information related to external parties. Based on the test of mean to the non-financial indicators show that the 4 indicators on indigenous has higher mean value (significant < 0.05) than Chinese ethnic. The result shows that the external information such as; on-time delivery performance record and speed of delivery orders are the focused of Chinese ethnic. Following the previous testing of the AIS alignment and non-financial indicator, it can be concluded that the indigenous are focused on the internal factors (reporting) whereas the Chinese ethnic are focus on external factors. The differences in non-financial performance are probably due to sample variation in the number of employees and age of the company. Based on previous findings that the company's age and the number of adequate human resources are potentially improves company performance (Ezzi, Azouzi, & Jarboui, 2016; Ismail & King, 2014; Uwizeyemungu, Poba-Nzaou, & St-Pierre, 2015).

7. LIMITATION

It is important to note that this study has many limitations, which can be addressed in future research. The first limitation related to the sample bias that might ruin the generalization of the findings. The sample was selected from retail SMEs cannot be generalized to all SMEs, so it makes a potential difference in the type of business in accounting information practice. The second limitation of this study relates to the definition of the SMEs itself. While it is generally accepted that the number of the employee will affects information systems implementation, a better technological function will be achieved with more employees (Ismail & King, 2006). The third limitation, this study was based on a survey. This approach has a limitation because it captures a situation or an event at a specific point of time. Future research can employ a qualitative method such as case study to further understand the AIS alignment process. Fourthly, this study examines the relationship between AIS alignment and non-financial performance. Future research can employ another measurement (both financial and non-financial) and explore the contingency theory to explain the relationship between all of the variables (Budiarto et al., 2015). This study does not describe the educational level of SMEs owners, so it needs to be analyzed in future research. The active positive learning is beneficial in gaining insights into managerial competencies, and supporting the managerial performance (Rice, Martin, & Rathnappulige, 2009; Segon & Booth, 2012). The results show that IT implementations are a focus on external factors (product oriented). It challenges for future research since the previous study which states that product-oriented is moderate level IT alignment (Hussin, King, & Cragg, 2002).

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